

RADCLIFFE-BROWN LECTURE IN SOCIAL ANTHROPOLOGY

ON THE TENDENCY OF HUMAN SOCIETIES
TO FORM VARIETIES

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A TITLE which deliberately echoes that of Darwin's joint presentation with Wallace to the Linnaean Society in 1858 may appear not only presumptuous but also inappropriate to a lecture in memory of Radcliffe-Brown, whose lifelong concern was with structure and function rather than with evolution, and whose vision of a 'natural science of society' was, it has often been said, more taxonomic than analytical. But the appearance is, I think, superficial, for two reasons. In the first place, as insisted by W. E. H. Stanner in his entry on Radcliffe-Brown in the 1966 *Encyclopaedia of the Social Sciences*, Radcliffe-Brown's 'fundamental viewpoint was thoroughly historical': if he neglected the study of history, it was not because he thought it unimportant but because he held the contingencies of human affairs to be too haphazard for effective schematization. In the second place, a taxonomy is implied by any theory which purports to explain why the structure of different societies is as it is and not as it might have evolved under other conditions: if Radcliffe-Brown's 'branch of natural science which will have for its task the discovery of the general characteristics of those social structures of which the component units are human beings'—as he put it in his Presidential Address of 1940 to the Royal Anthropological Institute¹—turns out to be barren, that can only be because the characteristics chosen for comparative study are the wrong ones. In this lecture, I shall argue that we do now know what characteristics we have to look for; that they can be related to the concepts of both structure and function in a way which makes systematic explanation possible; and that such explanation will and must rest on a theory of social selection analogous but not reducible to the theory of natural selection.

¹ A. R. Radcliffe-Brown, 'On Social Structure', reprinted in *Structure and Function in Primitive Society* (London, 1952), p. 190.

Whether Radcliffe-Brown would have been willing to entertain all three of these propositions I do not know. Perhaps he would have assented to the first two, only to balk at the third. But even so, I do not believe he would have regarded the attempt as inappropriate to his memory.

In 1959, four years after Radcliffe-Brown's death, the Scottish Branch of the British Sociological Association held a conference in Edinburgh in commemoration of the centenary of the publication of *The Origin of Species*. To its proceedings, published in 1961, an Introduction was contributed by Dr Jacob Bronowski, in which, after touching on the well-known difficulties posed by attempts to transfer the notion of the survival of the fittest from biology to sociology, he remarked: 'In biology, we are at this moment discovering how the atoms of inheritance, the genes, hang together to form what I will call molecular arrangements—that is the stable constituents of the gene complex. But in the social sciences, we know neither the units nor their stable arrangements.'¹ Bronowski then went on to point out that Darwin did not live to see the discoveries, now familiar to us, about genetics which furnish the theory of natural selection with a grounding that he himself was unable to give to it; and there is, perhaps, some comfort for sociological theorists in the fact that Darwin advanced our understanding of the evolution of species to the extent that he did, despite adhering, as it appears, to the view that acquired characteristics are heritable and the individual organism the unit of competitive selection. But Bronowski's question is, all the same, the right one. A late twentieth-century sociologist may not have to have any deeper knowledge of psychology than Darwin had of genetics, or any fuller a historical and ethnographic record to work on than Darwin had a fossil record. But any theory of social evolution deserving of the name needs to specify both what it is that social selection selects and what it selects it for. It is no longer—or so I trust—necessary to argue that social evolution is continuous with biological evolution, that the biological inheritance of the human species both creates and constrains the possibilities of institutional variation between societies, and that it cannot be genetic variation which explains institutional variation directly, for the simple reason that the extra-organic processes by which human beings transmit information and thereby culture to one another work much, much too fast. But although these familiar considerations are enough to rule out some wrong answers to the question, they

¹ J. Bronowski, 'Introduction', in Michael Banton (ed.), *Darwinism and the Study of Society: a Centenary Symposium* (London, 1961), p. xv.

are not capable by themselves of furnishing the right one. We need not waste further attention on misplaced analogies between societies and organisms, any more than on misapplications of the notion of 'the survival of the fittest' to competition between either societies or their individual members. But we do, before any possible candidate for the unit of social selection can be considered at all, have to be clear about what it is that human societies are to be taken to consist of.

Now this way of putting it may already be contentious to some. The objection which it invites is that I am presupposing that societies have boundaries sufficiently clearly defined that any and every sociologist, anthropologist, or historian can recognize one on sight. But I presuppose no such thing. Societies are defined as such by the observer, and (as was forcibly argued by Sir Edmund Leach in his Radcliffe-Brown lecture in 1976) it was a mistake of Radcliffe-Brown's to imply that either societies or species are entities unproblematically given in nature. There is a host of examples in the historical and ethnographic record of societies where geographical dispersion, exogenous influence, sub-systemic differentiation, cross-cutting ethnic, religious and familial loyalties, weak internal communication, civil discord, or even conflicting self-definitions of membership make it difficult if not impossible to establish a consistent and uncontroversial criterion for delineating their boundaries. But this need be no more of an impediment to the formulation of a theory of the evolution of societies than have been the corresponding difficulties with which biologists have had to contend in formulating a theory of the evolution of species. If it can be agreed—as I think social theorists of all rival schools would be willing to do—that sociologists, anthropologists, and historians look both for and at human institutions, and that these can be broadly defined as interrelated sets of rule-governed practices, then societal boundaries will be delineated by reference to institutional catchment areas in social space. The lines of demarcation will—indeed, will have to be—drawn at the point where empirical observation shows either that social relations have become so tenuous as effectively to elude the catchment of the institutions ostensibly governing them, or so weak that they effectively fall within the catchment area of another society. As species are bounded by the biologically transmitted capacity of their members to interbreed, so are societies bounded by the culturally transmitted capacity of their members to interact—that is, to behave towards one another as members of a common set of institutions in conformity with the rules which operate in the catchment area

within which they find themselves. To say this is not to deny that membership of societies by individual persons can be, and often is, either or both multiple and partial, or that individual persons can change from society to society whereas individual animals cannot change from species to species. But, equally, to point *this* out, and thereby to emphasize both the fluidity and the permeability of any boundary which the observer chooses to draw, is not to deny that societies can be identified as subjects for comparison and contrast. It is perfectly true that very few of those on record are closed, stable, autarkic, endogamous, and isolated to the point that no two rival observers could possibly disagree about the delineation of their frontiers. But it does not follow that those which are not are not societies at all.

This, however, still leaves open a number of possible answers to the question what societies are made of. To answer it by saying 'non-random interaction of persons within recognized institutional catchment areas' is trivial. Observers from rival theoretical schools are still free to claim that what makes the behaviour non-random is that the persons in question are, by virtue of membership of their societies, members of classes, or groups, or communities, or communication networks, or milieux, or sub-cultures, or shared universes of discourse and symbolism, or whatever else the particular observer may hold to be decisive in the explanation of why any chosen society is as it is reported to be. But there is, all the same, a general answer which is uncontentious without being trivial. Radcliffe-Brown was not mistaken in his emphasis on human beings as the components of social structures and therewith on the regularities of observed behaviour by designated persons, without which the notion of structure can have no application to human (or for that matter animal) societies at all. If what we are looking at and for are institutions defined as I have just done, then we are looking at and for regularities of behaviour which is not, or not merely, personal—or in other words, at the behaviour of people in roles. 'Role' is, admittedly, an all too familiar term which has generated much inconclusive discussion in the literature of anthropology, sociology, and social psychology alike. But I am not here concerned either with the 'clusters of rights and duties' of the anthropological textbooks or with the psychological implications of the metaphor of play-acting and the sense familiar to us all of outwardly conforming to norms towards which we may have all sorts of ambivalent and even hostile attitudes. From the perspective of sociological theory, roles are at the same time vectors in social space and associated patterns of behaviour informed by

mutually shared expectations and beliefs about the conformity—in the absence of special explanation—of that behaviour to some acknowledged institutional rule or rules. Whatever the subjective gap between a person and the role which he or she is both occupying and performing—the ‘role distance’, as Erving Goffman called it—to occupy and perform a role at all is to behave *as* something, and that something is defined by reference to characteristics of the institution, not the person, concerned. It is true that in some contexts, however unusual, a person can create a role by simple declaration of intent: there can, for example, be self-proclaimed warlords, or shamans, or entrepreneurs, who succeed by individual initiative in persuading a sufficient number of other people to become their retainers, disciples, or employees. But even here, the self-proclamation is in terms of an appeal to actual or prospective institutional rules which, innovative as they may be, are still recognizable as such by those to whom the proclamation is made. Likewise, it is true that people in existing roles can deliberately violate the institutional rules by which they are defined; but here too, non-random violation only has meaning as a tacit recognition that there *was* a rule to be violated in the first place. If human societies can be distinguished by the catchment areas of their institutions as observed at any one time, any and every society can be said to be fully defined by the itemization of all the roles of which its members are the reported incumbents.

The obvious practical objection which this raises is that the number of identifiable roles in any but the smallest and simplest societies is unmanageably large, quite apart from the difficulties posed by multiple incumbency and social mobility. But practising sociologists are well aware that they have to make a choice, and that their choice has to be dictated by some prior assumption as to which roles are more or less important for our understanding of the process by which societies have come to present us with the varieties which they have. It is at this point that the first decisive step in the argument has to be taken. But although decisive, it is not, I submit, as controversial as that might suggest. It involves no more than the invocation of another general sociological proposition which is hardly more than a truism, and the deduction of what follows from it. I have said that in looking at and for human institutions sociologists, anthropologists, and historians find themselves confronted with a range of societies which have, for that purpose, to be seen as consisting of people in roles. But since these roles (as I have also said) are defined by the rules of the particular institutions which govern them, they thereby licence the use of

the term 'social structure' at all times and places except the very few and unusual instances of total dissolution or chaos. The truism which now becomes relevant is that with the arguable exceptions of infants, hermits, psychopaths, and impending suicides, all members of all societies are engaged, by virtue of their roles, in influencing the institutional behaviour of one another. This, to be sure, is far from the whole of human life: there are all sorts of other aspects of behaviour which observers with other theoretical interests may wish to report, explain, describe, and (if so disposed) evaluate. But if our concern is with explaining the evolution of varieties of human societies as such, it is only those aspects of behaviour whereby the members of societies do to a significant degree further (or retard) changes in and of institutions which we have to analyse; and this means in practice that we are concerned both necessarily and exclusively with institutional relations of power. The term 'power' is yet another one of those which is as difficult to define as it is impossible to do without: as Bertrand Russell rightly said in 1938, it is as important a concept to social as the concept of energy to physical science.¹ But in the present context, it does not need to be defined any more precisely than by reference back to the notion of roles as embodying the different institutional rules through which the members of different societies do demonstrably influence each other's social behaviour. There is no need to beg the question how far that influence is exploitative or cooperative. Power, whether coercive, economic or ideological—and there are no other institutional kinds—may be exercised through inducements just as well as through sanctions. But it is only those members of societies who *are*, through their roles, exercising coercive, economic, or ideological power over one another whose behaviour is, or could ever be, relevant to the formation of varieties sufficiently marked to distinguish one type or mode of society from another.

Nor will an explanation in these terms be merely circular, any more than an explanation of the evolution of species by natural selection (although the accusation has, of course, been made). To say that a society's institutions are what they are because they are the outcome of a selective process which determines the allocation of the means of production, persuasion, and coercion among the incumbents of different roles does not absolve the researcher from showing what specifically caused the outcome now observed rather than some other which might have occurred but didn't. Indeed,

¹ Bertrand Russell, *Power* (London, 1938), p. 10.

it is common in sociology, as in sociobiology, to be faced with a set of observations for which there are too many, rather than too few, plausible hypotheses. To borrow a sociobiological example from Edward O. Wilson, cicada aggregations can be explained within the theory of natural selection as bringing the sexes together for mating, as permitting loud enough singing to confuse predators, or as saturating the local predators with a superabundance of prey. As Wilson says, 'Not only are these propositions difficult to disentangle and to test in the form just given; they may all be true. If more than one is true, some method must eventually be devised to assess their relative importance.'¹ Compare with this a sociological example taken from a recent study by Michael Roberts of the rise of a Karāva élite in Sri Lanka.² It can plausibly be explained as due to their adoption of Catholicism, to their involvement in catamaran fishing (and hence their evolution into a class of capitalist boat-owners), to their retention of traditional caste and kin loyalties in their recruitment to occupational roles, or to their philanthropic largesse in their local roles as community leaders. Again, all these hypotheses may be valid, and if so some method is needed to assess their relative importance. Roberts's account has not, as it happens, been accepted without question by other South Asian specialists.³ But that is not because the reasoning is circular. The position of the Karāva in the Sri Lankan social structure is not being explained by reference to attributes defined in advance as functioning to ensure their retention of power. On the contrary, the account given by Roberts is open to criticism by rival observers precisely because it is empirically disconfirmable.

This said, it is time to come back to the question: what does social selection select? It might appear that I have been leading up to the conclusion that the units of selection are roles. But that cannot be the right answer, for one simple reason. The same role may be defined by any one of several different sets of practices, and the same practice may be a defining attribute of any one of several different roles. From this, it follows that the units of selection are and can only be practices themselves—that is, functionally defined units of reciprocal interaction which are informed by a mutually acknowledged conformity to institutional rules, and therewith a mutually acknowledged capacity for the incumbents

¹ *Sociobiology* (Harvard, 1975), p. 29.

² Michael Roberts, *Caste Conflict and Élite Formation* (Cambridge, 1982).

³ See the review by Susan Baily, 'The History of Caste in South Asia', *Modern Asian Studies*, xvii (1983), 519–27, and the rejoinder by Roberts, 'From Empiricist Conflation to Distortion', *ibid.*, xix (1985), 343–52.

of the interacting roles to influence each other's behaviour by virtue of them. In this way, the answer is tied directly and explicitly to the underlying and inescapable concept of power. It is because of the effects that specified practices could in principle have been predicted to have under specified initial conditions that the trick is turned, and a theory of social selection can successfully claim to explain the evolution of any particular society chosen for study. Nor are the credentials of the theory impugned by the qualification 'in principle'. Mutation (or, it may be, recombination) of practices, like mutation or recombination of genes, has to be accepted as random, not in the sense of uncaused—whatever that would mean—but in the sense of independently, and often unascertainably, caused. If it is objected that this underestimates the effects of conscious decisions of policy, the answer is that the success of some rulers or reformers in changing some institutions to suit themselves is no more an argument against the theory of social selection than is the success of some stockbreeders in raising some exceptionally fast racehorses an argument against the theory of natural selection. Important as such special cases may sometimes be in explaining what happens in consequence, it is still no more realistic to ask a practising sociologist to predict the future evolution of societies than to ask a practising biologist to predict the future evolution of species. But then again, this no more undermines the validity of explanations advanced *post hoc* from within a theory of social selection than it does the validity of *post hoc* Darwinian explanations of the evolution of species.

In putting forward practices as the unit of social selection, I am well aware that there are other candidates in the field. I can hardly hope in the course of this lecture to refute them either individually or *en bloc*. But it may help to advance the case for practices as the unit of selection if I briefly consider two alternative suggestions and the reasons for which they fail. The first is the group, as argued by Carr-Saunders in 1922 and then 40 years later, in relation to animal populations, by Wynne-Edwards.¹ Carr-Saunders' claim that 'those groups practising the most advantageous customs will have an advantage in the constant struggle between adjacent groups over those that practice less advantageous customs'² is valid only because it is indeed circular—it explains the process by its outcome; and when Carr-Saunders does specify the process, it

¹ A. M. Carr-Saunders, *The Population Problem: a Study in Human Evolution* (Oxford, 1922); V. C. Wynne Edwards, *Animal Dispersion in Relation to Social Behaviour* (Edinburgh, 1962).

² *Op. cit.*, p. 223.

turns out that he has in mind maximization of income per head, which is empirically false. On the other hand, it only recreates the same difficulty when Richard Dawkins goes to the other extreme and, having dismissed Wynne-Edwards more or less out of hand in favour of genes as the units of natural selection, identifies the unit of social selection as any item of cultural transmission capable of replication, from fashions in clothes to the idea of God. To say that all such 'memes', as Dawkins christens them, are there because of their 'great psychological appeal'¹ is merely to explain process by outcome at another level. To avoid accounting, as Dawkins appears to do, for the survival of both of two incompatible systems of belief—religious and scientific—in the same blanket terms, the idea of 'memes' has to be tied in to the idea of social function. But even Radcliffe-Brown, so often criticized for a static if not trivial doctrine of functionalism, is quite explicit that not every 'meme' need have any social function at all.² The clue lies in Carr-Saunders' phrase about 'practising advantageous customs'. 'Custom' is yet another term with a chequered history in the academic literature, and is perhaps best used to distinguish practices sanctioned by the force of public opinion from those sanctioned by the force of law. But both customary and legal practices have social functions because and to the extent that they confer selective advantages which sustain or modify the social structure—that is, the allocation of economic, ideological, or coercive power among roles. It is thus only at the level between groups (and *a fortiori* societies) and items of replicable individual behaviour that there can be units of selection whose survival (or modification, or repression) is explicable within a theory which ties it to the notion of social function and thereby the evolution of one rather than another set of variant institutions.

But if practices are the units of social selection, what exactly is the process? It will not do just to say 'mutation or recombination of practices under selective pressure'. Practices are, indeed, frequently and often continuously modified under pressure. But what if the pressure—or, conversely, the opportunity—totally fails to bring about a modification which seems obviously necessary? If the Sri Lankan Karāva are a striking example of successful social adaptation, an even more striking example of a failure of adaptation is the Venetian nobility in the seventeenth and

¹ Richard Dawkins, *The Selfish Gene* (Oxford, 1976), p. 207.

² 'Taboo' (Frazer Lecture, 1939), reprinted in *Structure and Function in Primitive Society* (London, 1952), p. 145. His example is the taboo against spilling salt in our own society.

eighteenth centuries, whose decline is succinctly analysed in a monograph by J. C. Davis published in 1962,¹ which, although its conclusions have since been qualified by the more exhaustive researches of Dr Jean Georgelin,² still furnishes an instructive example for my purpose here. The decline not only in numbers and wealth but in both the capacity and the willingness to fill the political roles on which the government and administration of the Republic depended was recognized and deplored by numerous contemporaries. But the obvious remedy—the admission of ‘new men’ into a nobility defined strictly by birth—was only very occasionally and then reluctantly applied. The number of nobles continued to fall until by 1775 it was down to 1,300 men of office-holding age from the 2,500 there had been 300 years before; and when, in that year, the Great Council grudgingly approved a proposal to ennoble another forty families, a mere ten suitable ones applied. How then, it may fairly be asked, is this positively determined refusal to adapt to be explained from within a theory of competitive social selection? The answer is that the practices selected were those which were adaptive not for the society as a whole but for the nobility itself, and it was, of course, the nobility who held the preponderance of power. Their shift from entrepreneurial to rentier roles, their frequent restriction of the marriage of more than one son per generation, their failure to rebuild their numbers after the second plague of 1630–1, their increasing adoption of the *fideicommissum*, and their growing reluctance to accept election to governmental roles whose expenses outweighed their incomes were all adaptive responses which can be traced directly to changes in their institutional environment. The moral to be drawn is not that a theory of competitive selection of practices cannot account for maladaptation, regression, or indeed catastrophe, but that the process of selection operates through the groups, classes, factions, sects, estates, age-sets, orders, or whatever they may be which are not the units of selection but the carriers of the practices which are. It is the power of the carriers relative to one another which has to be correctly assessed if the outcome as observed in any particular society is to be explained. Practices are selected because, in their given context, they are an attribute of a role which gives some group or category of person in their roles an advantage in competing for power, and it is not always intuitively obvious which and why.

¹ J. C. Davis, *The Decline of the Venetian Nobility as a Ruling Class* (Baltimore, 1962).

² Jean Georgelin, *Venise au siècle des lumières* (The Hague, 1978).

This same example serves also to reinforce the point that the mutations and recombinations of practices which generate societal variation have to be treated as random whether or not they are adopted as a conscious strategy on the part of the incumbents of roles actively seeking to retain or augment the power attaching to them. No doubt even in the stablest and most conservative societies, there is always someone deliberately trying to change the existing distribution of the means of production, persuasion, or coercion in favour of his or her role. But it is yet another sociological truism that unintended consequences explain more about social evolution than intended ones. Whatever the motives of the persons who first create new, or modify existing, roles by the introduction of a novel practice, that practice has then to be analysed as a random input into the existing set of institutions which currently allocate coercive, economic, and ideological power among their constituent roles. There is, without doubt, a biographical story to be told about the particular person, whoever it may be, who at some given time and place first promulgates a law-code, or bestows a hereditary title of nobility, or hires a gang of labourers for wages, or sells political offices for cash, or organizes a combination of either manufacturers or workmen, or proclaims a religion of salvation, or recruits a standing police force, or lends out seed and tools in return for a share of the crop. But for the purposes of sociological theory, this can be taken for granted, just as can the features of a society's ecological environment which may equally well turn out to be crucial for its evolution. What matters is not how practices originate, but whether they catch on—not whether they are a conscious adaptation, but how adaptive for their carriers they actually are. The skill is to detect the new or modified roles which are going to turn out to be critical to the evolution of the society in question, whether the heavily armed infantrymen who began to lay claim to political participation in the *poleis* of Archaic Greece, the *baillis* who first appear in the administrative echelons of the French monarchy in the reign of Philip Augustus, the armed retainers of tenth- and eleventh-century Japan who attached themselves to regional lords rather than to the central government, the early English factory-owners still operating, so to say, as islands in a sea of small-scale artisan production, or the Communist-party cadres in the cities and villages of Kuomintang China as they started to build up their clandestine networks of contacts and cells. By the time that the novel role is there to be observed and reported by the enquiring anthropologist, sociologist, or historian, the mutation or recombination of practices has already occurred: it

is the effect of that mutation or recombination which has to be predicted in principle (and can, in practice, only be explained with hindsight).

Here, then, is where the tendency of human societies to form varieties lies. As I stressed at the beginning, it is a matter of subjective judgement at what point the changes in roles and thereby institutions which result from a mutation or recombination of practices should be held to take a society from one to another separately definable type or mode of the distribution of the means of production, persuasion, and coercion. Moreover, in any given case, the story is likely to be full of contingencies and might-have-beens: whether the carriers of mutant or recombinant practices win or lose in their competition for power with other groups, classes, factions, sects, and so forth will depend as much on the dramatic sequences of individual cause and effect which are the stock-in-trade of the historian as on the subtle networks of institutional feedback which are the stock-in-trade of the anthropologist. But once it is all over, evolution from one type or mode of society to another will always be seen to have come about through a process initiated by a mutation or recombination of practices and consummated by the transformation of existing roles and institutions that the carriers of those practices have brought into effect.

A process of this nature will not and cannot generate a unilinear evolutionary sequence from one type or mode to the next. Nor will it, or can it, generate resemblances of structure and culture which will lend themselves to lawlike synchronic generalizations. It therefore is—or should be—no surprise that the only pattern disclosed with hindsight by the major evolutionary shifts in human history, from the so-called neolithic to the so-called industrial revolution, is a pattern of homologous practices and roles performing dissimilar functions and analogous functions being performed by dissimilar practices and roles. Let me offer as examples two standard sociological topics, one from a very early and one from a very late stage in the evolution of human societies: the origin of the state and the diffusion of capitalism. No one any longer maintains that states originate from a single cause such as war, or population increase, or trade, or religion. They originate from practices related to these which, in a context of competition for expanding economic, ideological, and coercive resources, favour the incumbents of emergent governmental roles which are both specialized and permanent. Both the practices involved and the sequence of their mutation or recombination vary widely. The

context may be peace or war, and if war then either offensive or defensive. Population growth may precede, accompany or follow state formation. Trade—and particularly long-distance trade—may be either its occasion or its consequence. Religious practices may already be constitutive of proto-governmental roles or may, as it were, be grafted onto them later. But once the incumbents of the new governmental roles have established themselves in power, they can be seen to have carried specific, identifiable practices whereby they have been transformed from elders, lineage heads, local chiefs, ritual specialists, village headmen, shrine priests, large landholders, judicial arbitrators, or war-party leaders into kings, magistrates, paramounts, pharaohs, archons, dictators, or presidents with central control of the means of coercion; and therewith their followers, clients, retainers, servants, household dependents, or junior kin come to occupy the novel role of subjects, whether voluntarily or not.

Similarly, the diffusion of capitalism—by which I mean the employment of wage-labourers by private owners of the means of production in order to market the goods thereby produced for profit—has followed no uniform sequence and come about, where it has, in very different ways. This is not simply because, as emphasized by Braudel¹ and others, of the importance of differences in the power of the state. Nor is it simply because, as with the origin of the state, there is no single necessary or sufficient condition, whether geographical, technological, ideological, or demographic. The point is rather the range of contexts in which the use of wage-labour does or does not confer a competitive advantage on capitalists or wage-labourers or both. The practice, after all, is a very old one, and is abundantly documented all the way from the porters, builders, and seasonal agricultural labourers of the ancient world through the landless villagers of medieval Europe to the nineteenth-century African day-labourers paid in cowries for artisan production. But only at certain times and places does it catch on to the point that the roles of capitalist and wage-labourer cease, to borrow one of Marx's celebrated phrases, to reside in the pores of the old society but come fundamentally to alter the mode of allocation of the means of production, persuasion, and coercion. The role of capitalist may evolve from that of trader, or craftsman, or administrator in the service of a government or court, or money-lender, or contractor, or pirate, or landlord, or even that of peasant pioneer like the early cocoa farmers of the Gold Coast studied by

¹ Fernand Braudel, *Afterthoughts on Material Civilization and Capitalism* (Baltimore, 1977), ch. II, sec. iv.

Dr Polly Hill,¹ who were more or less compelled to supplement the labour of their families with wage-workers from neighbouring regions who were then paid by the load. The role may be favoured by the prior existence of a highly-stratified social structure which enables tributary labour to be commuted into cash or, on the contrary, by a lineage mode in which landholding or stockholding elders oblige younger men to take up wage-labour in order to have the bridewealth necessary for marriage to women controlled by the elders. The new capitalists may recruit their wage-labourers from migrants, from emancipated bondsmen, from impoverished smallholders or artisans, or from dependent women and children. There is no common pattern of evolution except that the degree of competitive advantage conferred by the practice of wage-labour on the incumbents of the novel roles of capitalist and proletarian is a function of the allocation of power in the given context; and once again, it is only with hindsight that it is possible to see precisely where that advantage lay.

Now I have not forgotten that I claimed in my introductory remarks that systematic explanation of the variety of human societies must rest on a theory of social selection analogous but not reducible to the theory of natural selection, and before my peroration I need to say at least something more in support of that claim. The misplaced analogies between them have, as I have already implied, had quite enough criticism not to need any more from me or anybody else. But in at least seven respects, there is an analogy which is both valid and illuminating.

First, the competition between the carriers of the units of selection is not a knock-out competition in social any more than in natural selection. In a world of finite resources, societies and the incumbents of the roles which define them are competitors for power, as species and their individual members are competitors for survival and reproduction. But this does not mean that the less favoured are bound to become extinct. On the contrary: it is wholly consistent with both theories that there should be cases of symbiotic equilibrium and that societies, like species, should sometimes find a niche in which they will reproduce their roles and institutions more or less unchanged for successive generations in the absence of outside interference.

Second, there is not in social any more than in natural selection a one-to-one correspondence between atoms, as it were, of the material of selection and the competitive advantages accruing to

¹ Polly Hill, *The Migrant Cocoa-Farmers of Southern Ghana* (Cambridge, 1963), pp. 187-90.

their carriers. Just as in natural selection the object selected may, according to context, be different chromosome segments or regions of DNA, so in social selection the object selected may be different chunks of replicating institutional behaviour. Practices can and should be as flexibly defined as genes; and as one philosopher of science has recently observed: 'Molecular biology is very tolerant; it countenances as many concepts of the gene as the rest of biology may require.'¹

Third, social interaction between the incumbents of different roles in the same society performs the same function as sexual interaction between members of the same species. It has an analogous creative capacity of its own. It is yet another relevant sociological truism that roles are always two-sided, and although the adoption of novel practices may, where there is an extreme imbalance of power, be a wholly one-sided affair—the obvious example is enslavement—it is much more common for it to arise from the interaction between the incumbents of two or more pre-existing roles and the groups, classes, factions, sects, and so forth which are made up of them.

Fourth, the advantage conferred by a practice on its carriers in the competition for power, like the reproductive advantage conferred in natural selection by a gene, may initially be so slight as to be hardly perceptible. There is not in sociology, as there is in biology, any special problem about accounting for very rapid evolution from one variety to the next because of the enormously greater speed of cultural transmission. But where social evolution is, on the contrary, slow, it may well be because only when the context changes does the slight advantage to the carriers of the mutant or recombinant practice increase to the point that the allocation of the means of production, persuasion, or coercion in the society concerned is significantly changed and a new type or mode evolves.

Fifth, there corresponds to the part played by population genetics in well-grounded explanations of natural selection the part played by demography (including the analysis of social mobility) in well-grounded explanations of social selection. I have so far mentioned social mobility only in passing, and cannot in the time available give it the attention it deserves. But the distribution of persons among roles both within and between successive generations is itself both a symptom and a cause of changes in the mode of allocation of the means of production, persuasion, and

¹ Philip Kitcher, 'Genes', *British Journal for the Philosophy of Science*, xxxiii (1982), 357.

coercion. The process whereby selective pressure alters the distribution of practices in a society through its action on rates of mobility, fertility, mortality, and physical migration needs to be modelled as precisely as it can, just as does the process whereby the coefficients of natural selection alter gene frequencies—and the arithmetic gets quite complicated in both cases.

Sixth, the exceptional individuals who do, intentionally or otherwise, radically transform the institutions of their society through the practices of which they are the carriers correspond to the phenodeviants, as they are called, which occur in animal populations through the segregation of unusual combinations of otherwise normally distributed genes. Phenodeviants tend to appear, in natural as in social evolution, when selective pressure is particularly intense, and in both cases deliberate selection can accelerate the penetration of the mutant or recombinant genes (or practices) which they carry.

Seventh, social selection, like natural, operates at more than one level: practices, like genes, are selected because they are attributes of roles, as genes are attributes of organisms, which confer a competitive advantage on groups and categories of persons, as genes do on populations of a given species. In the study of natural selection, it has often been shown that evolution occurs because different demographic parameters at group level confer a decisive reproductive advantage in different ecological contexts: thus, for example, rate of population increase may be either more or less advantageous than population density. I am well aware, in saying this, that the precise relation of gene to group and kin selection is a controversial topic in theoretical biology. But the point to be stressed for my purpose is that, just as the individual organism is both a 'gene-transmission machine' and a member of a population whose emergent properties have greater or lesser survival and reproduction value, so is the individual role-incumbent both a 'practice-transmission machine' and a member of a group or category whose emergent properties confer a greater or lesser advantage in the competition for coercive, economic, and ideological power.

Now, however persuasive all this may sound when sketched out in such general and oversimplified terms, the underlying ideas need of course to be tested across the full range of societies in the historical and ethnographic record. It will not do just to display them to advantage in pre-selected cases. They must be tested to destruction—if such it turns out to be—against the awkward ones. But if there is any merit in them at all, two morals can, I think,

confidently be drawn. The idea of social evolution has been around for a long time by now, and many false trails have been followed from it to dead ends since Darwin drew from his reading of Malthus in the autumn of 1838 the idea of competitive selection in a world of limited resources. But we can if nothing else lay finally to rest the ghosts of two false oppositions which have haunted the discussion in the past. The first is the opposition between a Marxian version of social evolution whereby the end-state of human societies is a communism in which the struggle between classes is transcended, and a Spencerian version in which the end-state is an individualism in which organic harmony is achieved through free competition. The opposition is false not simply because it is an opposition between political creeds as much as between scientific theories but because there is no end-state. Evolution is not in that sense teleological: it is not in the direction of any predetermined goal. But nor is there any merit in the equally false opposition between an evolutionism, in which change is held to be the norm and stability the exception, and a functionalism, in which self-equilibrating structures are held to be the norm and changes of type or mode the exception. A theory of social selection analogous to the theory of natural selection can account as well for the one as for the other. That the process which promotes (or retards) the formation of varieties is as it is may be upsetting to the presuppositions of those who would still like to believe that there is some grand teleological process at work. But the crises of political faith which may be touched off by advances in our understanding of the evolution of societies are no more relevant to the achievement of such advances than the crises of religious faith touched off by advances in our understanding of the evolution of species. And with that concluding proposition I have no doubt that Radcliffe-Brown would have agreed.